

83. The method of Claim <sup>87</sup>~~94~~, wherein the product collection is caused to be retrieved using a flexible identification procedure.

84. The method of Claim <sup>87</sup>~~94~~, further comprising the Web user, during the subsequent session, performing at least one of the following actions: adding an item to the first product collection, deleting an item from the first product collection, deleting the first product collection, and at least partially duplicating the first product collection to form a different product collection.

85. The method of Claim <sup>87</sup>~~96~~, further comprising changing at least one parameter of a duplicated item, wherein the parameter is one of the following: quantity, price, cost and term.

86. The method of Claim <sup>87</sup>~~96~~, further comprising classifying product collections into multiple categories according to use.

87. The method of Claim <sup>86</sup>~~98~~, wherein said categories include at least one category in accordance with which a product collection is used as a customized miniature electronic catalog.

88. The method of Claim <sup>87</sup>~~99~~, further comprising an authorized user making changes to a customized miniature electronic catalog via the Web.

89. The method of Claim <sup>88</sup>~~100~~, wherein the changes made by the user are immediately effectuated.

90. The method of Claim <sup>82</sup>~~94~~, further comprising the Web user, during the subsequent session, creating a second product collection specifying as an item at least one item from the first product collection.

Sub C 1  
91. In a Web-based business-to-business electronic commerce system including a database and a Web server, a method comprising the steps of:  
creating within the database item collections, each item being a potential subject of a business transaction; and  
users creating new item collections at least partially derived from existing item collections, producing a multiplicity of item collections related by derivation.

92. The method of Claim <sup>91</sup>103 further comprising applying different classifications to different product collections.

93. The method of Claim <sup>92</sup>104, wherein the product collections include quotes.

94. The method of Claim <sup>92</sup>104, wherein the product collections include Master Worksheets.

Sub C 3  
95. A method of processing customer service requests relating to a product, including returns, over the Web, comprising:  
defining an automated workflow process for customer service requests, including returns, that uses a database and a Web-enabled database management system; and  
a user, via the Web in a self-help manner, causing a customer-service/return record to be created in the database.

C  
96. The method of Claim <sup>95</sup>107, wherein the customer-service/return record created is related to a pre-existing database record.

Sub D 3  
97. The method of Claim <sup>96</sup>108, wherein, for at least some customer-service/return records, the automated workflow process reverses a previously executed workflow process.

98. The method of Claim ~~107~~<sup>95</sup>, wherein the customer-service/return record is categorized in accordance with types including multiple ones of the following types: under warranty part not required, under warranty part required, out of warranty part not required, out of warranty part required, mis-shipped, refused, lost or damaged with or without insurance claim, missing components, duplicate shipment, inventory, cancellation, transferred order, and never shipped.

99. The method of Claim ~~110~~<sup>98</sup>, including hierarchically related customer service/return record types.

100. In a Web-based business-to-business electronic commerce system including a database and a Web server, a method of transaction processing, comprising the step of:

obtaining from multiple parties via the Web demand information specifying an item to be the subject of a transaction; and

within said database, organizing transaction information into self-contained workflow units having a predetermined format and each including demand information for a particular party, the predetermined format defining a command demand document enabling demand information to be capsuled for a range of differentiated business transactions of different complexity.

101. The method of Claim ~~112~~<sup>100</sup>, wherein the database contains workflow units derived from multiple ones of the following sources: customer, vendor, and database owner; the method comprising the further step of grouping demand information from different ones of said sources.

102. The method of Claim ~~112~~<sup>100</sup>, wherein said workflow units are each related to one or more item-level records, updates to which are immediately and automatically propagated throughout the database.

7  
103. The method of Claim ~~112~~<sup>4</sup>~~100~~, wherein a workflow unit is related to at least one of a related workflow unit and a customer-service/return record.

8  
104. The method of Claim ~~112~~<sup>4</sup>~~100~~, further comprising displaying a workflow unit in said predetermined format, including displaying as part of said predefined format a plurality of user options for taking action with respect to the workflow unit or with respect to items specified within the workflow unit.

9  
105. The method of Claim ~~112~~<sup>4</sup>~~100~~, wherein said demand information is current customer demand information obtained via said Web server.

10  
106. The method of Claim ~~112~~<sup>4</sup>~~100~~, wherein said demand information is internally generated.

11  
107. A method of organizing and displaying information stored within a database to facilitate a user task, comprising the steps of:

specifying a classification scheme, consistent with common business practice and terminology;

applying an algorithm whereby items are classified, marked and displayed according to classification for performing a particular business function; and

within a single display screen, displaying the categorized items along with one or more user interface controls for taking action with respect to one or more items.

12  
108. The method of Claim ~~119~~<sup>107</sup>, wherein said items are classified in accordance with a hierarchy of classifications such that an item is classified within a highest classification within said hierarchy that pertains to said item.

109. A method of handling customer requests over a global computer network, comprising the steps of:

receiving via a global computer network a post-sale customer request related to a previously-sold item;

evaluating the request based on customer-specific criteria, including criteria set by at least one business partner, and historical data; and

if the applicable criteria are met, automatically approving the request.

110. A method of satisfying demand using a global computer network, comprising the steps of:

receiving demand information from multiple sources via a global computer network;

grouping demand information received from multiple different sources, producing grouped demand information;

retaining a distinct record of individual demand information received from each of the multiple different sources;

performing one processing step using the grouped demand information; and

performing another processing step using the individual demand information.

111. The method of Claim <sup>110</sup>~~122~~, further comprising propagating demand information to at least one of customers and suppliers, including applying a classification scheme whereby items are classified, marked and displayed according to classification.

112. The method of Claim <sup>110</sup>~~122~~, wherein the demand information includes demand information from multiple ones of the following sources: customer, vendor and database owner.

113. A method of establishing an end-to-end business-to-business commerce system for the sale, or sale and service, of product items, using a Web-enabled relational database management system running on a server platform, the method comprising the steps of:

for at least one business partner, storing within the database, in accordance with a single database schema, all current records required to perform a full spectrum of business functions throughout a life cycle of each product item; and

limiting a number of business partners for which current records are stored within the database.

13  
114. A method of establishing an end-to-end business-to-business commerce system in which product items are sold, using a Web-enabled relational database management system running on a server platform, the method comprising the steps of:

providing within a single automated system data and methods spanning multiple business functions, the data being stored in accordance with a single database schema;

providing a user interface that allows open navigation by a user between information pertaining to different business domains, and, for each of multiple business functions, displaying within an integrated decision making environment complete information required to perform that business function; and

dynamically defining multiple virtual business departments by, for each of multiple groups of people, assigning substantially similar access privileges to each person within the group, wherein the access privileges of different groups are substantially different.

115. The method of Claim 126, wherein different people within the same virtual department work in geographically distant locations.

15 116. A method comprising the steps of:

providing an end-to-end, business-to-business, e-commerce business automation software for automation business functions across multiple business domains;

identifying multiple modules of the software; and

via Web administration, producing a software configuration in which selected ones of the modules are enabled or disabled;

wherein the software producing a workscope/workflow structured display of complex database records each comprising multiple lines of text and pertaining to both a first party to a business transaction and a second party to the business transaction, the structured display constituting an integrated decision-making environment for a particular business function.

16 ~~117~~. A system for end-to-end, business-to-business electronic commerce, comprising:

a server platform running a Web-enabled relational database management system; stored in the database, an item table comprising item records, each item record containing business domain-specific fields pertaining to a plurality of the following business domains: products, payments, performance and personnel;

software for reading item records, organizing selected information from the item records, and presenting the selected information as domain-specific displays;

whereby, once item information has been input and committed, it is immediately available for viewing by a multiplicity of information workers, different information workers having responsibility for different ones of said domains.

17 ~~118~~. ~~The apparatus of Claim 129~~, wherein, information stored within a field of an item record is the only instance of that information within the entire database.

Respectfully submitted,

Burns, Doane, Swecker & Mathis, L.L.P.

By:



Michael J. Urd  
Registration No. 33,089

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(650) 854-7400

Date: July 15, 1999